

Dr. ALDRICH stated that entomological courses in the larger universities had been changed considerably of late, and that only comparatively recently had any institution offered a course in taxonomy. This change in the curriculum of the larger universities should in time produce more taxonomists.

The paper was also discussed by Messrs. HYSLOP, BRIDWELL, SNODGRASS, HEINRICH, and SASSCER.

Second paper: Dr. J. M. ALDRICH. *A manuscript autobiography of S. W. Williston.* Dr. ALDRICH read the greater part of this manuscript which Dr. Williston wrote in 1916, about two years before his death. This dealt with the period of his childhood and early manhood and continued through a period of about eighteen years after graduating from college, during which he had a continuous struggle to obtain a foothold in science.

#### 355TH MEETING

The 355th meeting was held February 1, 1923, in Room 43 of the New National Museum, with President Dr. L. O. HOWARD, in the chair and 30 persons present.

##### Program:

E. GRAYWOOD SMYTH: *A trip to Mexico for parasites of the Mexican Bean Beetle.* The speaker arrived in Mexico City on May 14th, 1922, and left there for the return trip on November 14th. Practically all studies and collecting were performed in the states of Morelos, Puebla and Vera Cruz, and the Federal District. In the lower altitudes, the beetle was not found in injurious numbers at the towns visited except at Cuernavaca. In the Federal District, on the high central plateau, there seems to be but one, and rarely two, generations of the beetle in a year, as in New Mexico, the first appearance of the adults being governed by the rainy season. Adults first appeared in early June, the first eggs during latter June, and the first larvae during the first week of July. Larvae were not large enough nor abundant enough to be injurious until the latter part of July. From that date on they thrived in abundance until October 9th, when a heavy frost killed all the bean plants in the Federal District.

No parasite was found of either the egg or adult of *Epilachna*. The only parasite encountered was a Tachinid fly, of about the size of the house fly, which attacks the larvae. It is apparently of a new genus and new species, and is being named by Dr. Aldrich. What was apparently this same fly was found attacking a related beetle, *Epilachna mexicana*, that feeds on a wild plant of no economic importance. This Tachinid was found only at or near Mexico City and at Cuernavaca. The first puparium was reared from an *Epilachna* larva on August 31st, and from that date the flies increased in numbers until early October, by which time they were parasitizing from 30 to 50 per cent of *Epilachna corrupta* larvae. It was not known why the flies were so late in making their appearance.

A total of 1866 living puparia of this fly, or *Epilachna* larvae parasitized by the fly, were shipped and brought to the States, and approximately 50 per cent of these are now being held in hibernation at the Birmingham Laboratory for the coming spring. About 90 per cent of these came from the Federal District, from a town called Coapa. The author believes that this fly, if successfully colonized at Birmingham, would spread rapidly and do much toward control of the bean beetle.

Few predacious enemies were found, the only common one being a species of *Stiretrus* (Hemiptera, Pentatomidae), which was not sufficiently abundant to be of control value. A large number of egg masses of another predacious

bug, *Zelus* sp., collected on Agave plants near bean fields, were shipped to Birmingham, but the young nymphs, when reared at the latter place, refused to feed on *Epilachna* larvae.

As to wild food plants: the large numbers of leguminous plants and trees were examined for *Epilachna* in Mexico, only two were found to harbor the beetle. One is a wild climbing bean, *Phaseolus* sp., abundant along streams, the other a wild weed known as beggar-weed, or tick trefoil (*Meibomia* sp.) The latter harbored large numbers of bean beetles of all stages, and was believed to be the beetle's native wild food plant.

This paper was discussed by Messrs. ALDRICH, BRIDWELL, HOWARD and SCHWARZ.

Second paper: Dr. A. C. BAKER, *A history of the study of plant lice.*

Notes: J. C. BRIDWELL discussed the occurrence of the clover seed chalcid in the seeds of *Astragalus*.

Some months ago the speaker had reported the discovery of *Bruchophagus funebris* in pods of a species of *Oxytropis* (*O. lamberti*), a genus closely related to *Astragalus*. It is now possible to record an additional instance of attack upon an *Astragalus* by a *Bruchophagus*. This was discovered in a specimen of *Astragalus douglasii* in the National Herbarium collected on June 25, 1891 by Coville and Funston near Tehachipi, Kern County, California, at an elevation of 1000 metres. The *Bruchophagus* was accompanied in its attacks by *Acanthoscelides pullus* (Fall) and had at first been mistaken for a *Eurytoma* parasitic upon the Bruchid. The material from its age and its condition after having been extracted from the seed is not in the best of condition for determination and in it Mr. Gahan sees certain apparent differences of sculpture and color which do not permit him to positively determine it as *funebris* and suggest its belonging to another species, the question of its identity requiring biological evidence for its answer.

The finding of *Bruchophagus* in pods so different from the fruit of the previously known host plants in *Trifolium* and *Medicago* as the compact ovoid pods of *Oxytropis lamberti* and the large bladdery membranous pods of *A. douglasii* does not seem so strange when it is recalled that the oviposition is done early in the development of the young pod. How far the finding of additional host plants of *Bruchophagus* will effect practical control remains for investigation.

#### 356TH MEETING

The 356th meeting was held March 1, 1923, in Room 43 of the New National Museum, with Vice-President Dr. A. G. BÖVING in the chair and 38 persons present.

Mr. ROHWER, for the Executive Committee, stated that since the last meeting the Society had received a communication from the Secretary of the International Commission of Zoological Nomenclature requesting that a committee be appointed to prepare preliminary reports on questions of Entomological Nomenclature referred to the Commission. President Howard had appointed as the Society's Committee, Messrs. ROHWER, HEINRICH and BAKER; and since the announcement of the Committee the Commission had referred three distinct questions to its Chairman.

F. W. POOS was elected to membership in the Society.

Program:

R. E. SNODGRASS: *The anatomy and metamorphosis of the apple maggot* (*Rhagoletis pomonella* Walsh).

The following generalizations probably apply to most of the *Cyclorrhapha*: